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## **HOW BOOKS ARE MADE**

"OF MAKING MANY BOOKS
THERE IS NO END."
—Ecclesiastes.

THE JOHN C. WINSTON COMPANY

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PHILADELPHIA

# HEAVER DECKS ARP MADE







"LET NOT YOUR HEART BE TROUBLED \* \* \* "-John xiv, 27.



A GLIMPSE OF THE BUSINESS OF THE JOHN C. WINSTON COMPANY PUBLISHERS

ILLUSTRATED WITH PHOTOGRAPHS TAKEN IN THE WINSTON PLANT

"BOOKS SHOULD TO ONE OF THESE FOUR ENDS CONDUCE—

FOR WISDOM, PIETY, DELIGHT OR USE."

—SIR JOHN DENHAM.



WINSTON BUILDING 1006-1016 ARCH STREET PHILADELPHIA, PA.



WINSTON BUILDING

HOME OF THE JOHN C. WINSTON COMPANY 1006-1016 ARCH STREET PHILADELPHIA, PA.

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Prof. G B Roorbach



#### HOW BOOKS ARE MADE.

"Next to acquiring good friends, the best acquisition is that of good books."—C. C. Colton.

HE average book reader has little conception of the many processes through which a book must pass in the making before it is ready for his or her entertainment or instruction.

Perhaps if there were a better realization of the thought and care bestowed on the making of a worthy book there would be a correspondingly greater appreciation and enjoyment on the part of the reader.

With this hope in view we have thought to describe briefly and simply how books are made—particularly how GOOD books are made by The John C. Winston Company—which process, indeed, is perhaps interesting enough of itself to warrant the telling.

GENERAL OFFICE OF THE WHOLESALE DEPARTMENT

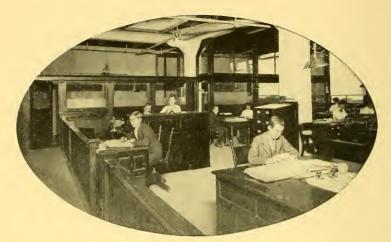


A CORNER OF THE EDITORIAL ROOM. Through this department thousands of manuscripts pass annually and are keenly searched for those that promise successful publication.

### THE MANUSCRIPT

Practically every large publishing house maintains a staff of trained critics or "readers" whose duty it is to examine carefully the innumerable manuscripts

submitted, with a view to selecting such as are desirable for publication. It is not practicable within these limits to describe all of the factors that bear on the selection of a manuscript, but it may be mentioned that not only the merit of the composition is to be taken into account, but also the extent to which the character of the work conforms with the general policy of the house, the suitability of the channels of distribution at the command of the publisher, the probable extent and permanency of the demand for such a book, and many other considerations more or less technical. For every embryo book which will pass scrutiny from all of these directions, many others, alas! must be rejected for reasons that may have no relation to the intrinsic worth of the work.



ANOTHER SECTION OF THE MAIN OFFICE



CONSULTATION ROOM, where officers of the Company and heads of departments meet daily to formulate policies and outline plans.

The next step after the acceptance of a manuscript, or the "copy" as it is technically known, is to examine it carefully to insure correctness of punctuation and uniformity of spelling. It is then ready for the type-setter or "compositor."

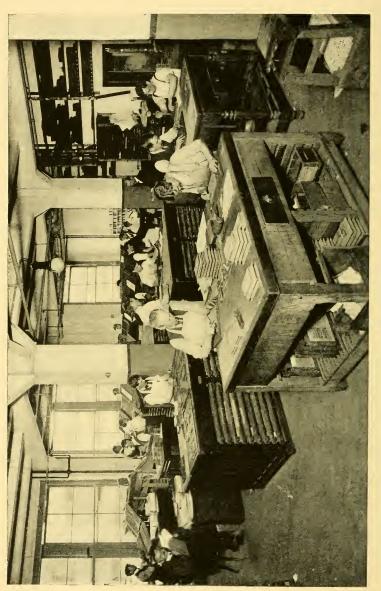
The planning and preparation of the illustrations is a matter frequently involving a great deal of thought and work. The plan must be made in keeping with the scale on which the book is to be printed. Photographs or drawings, or both, must be procured, sometimes at very great difficulty and expense. When this material is ready the engraving department prepares the necessary line-cuts, half-tones or color plates. Some of these are incorporated in the type pages; others are printed separately on special paper and brought together with the type pages in the bindery.

SETTING THE TYPE Much type-setting for fine book work is now done on the Lanston Monotype Machines, which are wonderfully intricate and efficient machines for making a

separate metal cast of each individual letter and character, and which have the important advantage of furnishing new



THE SUBSCRIPTION DEPARTMENT, in which are recorded the thousands of subscriptions received annually for the Winston publications.



A CORNER OF THE COMPOSING ROOM OR TYPESETTING DEPARTMENT. This department is equipped to set type in many languages, including Babylonian hieroglyphics, so thorough is its equipment.

and perfect type for each piece of work. Intricate composition and the combination of several different styles of type are performed by these machines with remarkable facility.

We also use extensively the well-known Mergenthaler Linotype Machines which, as the name implies, cast each line of type in a solid piece or "slug." These machines are used not only in book work, but also in the many periodicals, monographs, etc., which we print.

A large amount of fine work is also set by hand, the compositor picking up each letter from the type cases and setting it in a receptacle known as a "stick."

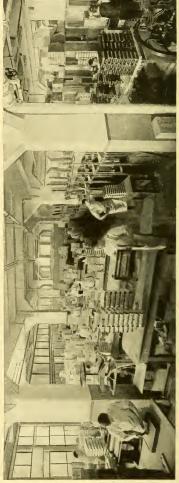
The type-set matter is transferred to a "galley," or long, shallow tray, and a proof made. After the proofreader has gone over the proof and marked his corrections on this sheet the required changes are made in the type. Then the lines of type are divided into pages of the proper length, a running headline and page number are added to each page, and page proofs are made and again carefully corrected.

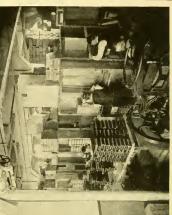
When all errors have been eliminated the pages of type are securely wedged in an iron frame, known as a "chase," to keep the



LINOTYPE AND MONOTYPE MACHINES. The Linotype machines set and cast type in solid lines. The Monotype machines set and afterward mold the individual type characters, completing their work in the form of typesetting done by hand.







BELOW: A SCENE ON ONE OF THE FLOORS OF THE BINDERY Every machine in every department of the plant is operated by an individual electric motor, thus obviating all shafting and creating healthful conditions through light, airy workrooms. ABOVE: GENERAL VIEW OF THE CYLINDER PRESS ROOM.

types permanently in form. If the book is to be printed direct from type, large chases are used, each chase containing a number of type pages so arranged that when the form is printed and the sheet folded the pages will appear in the proper sequence and with proper margins.

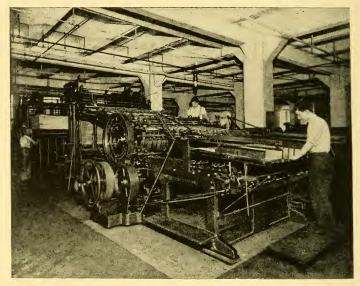
If, as usual, the book is to be printed from plates instead of from type, the type pages are locked up in small chases and sent to the electrotyping foundry. Here a meta cast is made of each page and thinly coated with a chemical deposit of copper. The reason for printing most books from electrotype plates is that many editions can thus be printed without the expense of resetting the type for each edition.

PRINTING THE BOOK When the plates are ready they are locked firmly in place in the press, which is also supplied with the paper on which the book is to be printed. Several

trial sheets are run as a guide in leveling up the forms so that



ONE OF THE AISLES OF THE CYLINDER PRESS ROOM



A SELF-FEEDING PRESS

A ton of paper is ofttimes placed on the self-feeding attachment which feeds one sheet
at a time into the press, where it is printed and cut in one automatic operation.

the printed impression is clear and uniform and the illustrations properly brought out. Everything being in readiness, the presses are then speeded up and the actual production of the book is on its way. The automatic feeding machines are not the least interesting part of a modern printing press. These devices, with a deftness greater than that of the human hand, pick up the sheets from the pile of paper and feed them one at a time into the press, each sheet being adjusted so finely that the printed impression is made in exactly the right place. We have had a 450-page book running on fourteen presses at once, one form of thirty-two pages on each press, each revolution of the presses in unison meaning the delivery of a completely printed book. To watch a team of fourteen presses making books at the rate of 1,500 an hour, and to know that they are to run at least two weeks without stopping, is indeed a deeply

impressive sight. To the purely mercenary mind it may only suggest the profit in the sale of the books, but to the finer mind there is not only an almost reverent admiration for the perfectly co-ordinated mechanism, but also a sober reflection on the influences which will be imparted as these books find their way to almost every corner of the globe to lend pleasure and instruction to hundreds of thousands.

#### BINDING THE BOOKS

As the sheets are printed they are conveyed to the bindery. Here they are first folded into what are known as "signatures," a name derived from the distinguishing letter or number which is usually printed at the

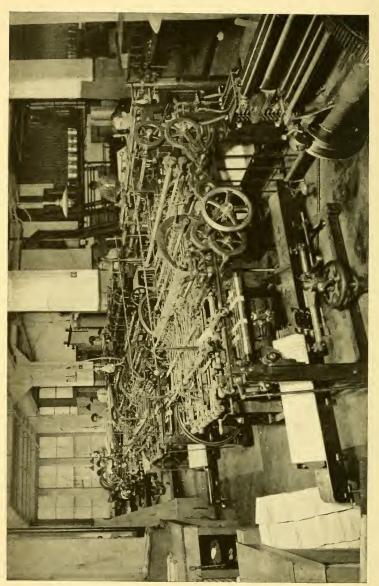
foot of the first page of each sheet for convenience in gathering

the folded sheets together into a book. As the signatures are gathered the illustrations are inserted in place, and the whole is then sewed together to form the complete volume. The sewed books are next trimmed and put through a machine which rounds the back, hollows the front and forms a joint for the cover boards to seat in.

By this time the paste-boards have been cut out for the sides and the cloth covers pasted over them to form the "cases," or covers.



SOME OF THE HAND PRESSES FOR SMALL JOB WORK



These automatic machines will fold, on an average, 200 sixteen-page sheets per minute. For the folding of "International" Bibles special machinery was built to successfully handle the thin paper in the careful manner required in Bible making.

These are stamped with gold or inks in a hot press from a die on which the cover design has been engraved. Paste is now spread on the lining of the books and they are inserted in the cases. The books are completed by being subjected to pressure in standing presses for several hours until they have thoroughly set in their final shape. Each book is then most critically inspected, then wrapped, and is finally ready to be sent out.

Bible binding and other fine leather work is done almost entirely by hand, more slowly and expensively than the binding of the popular books we have described. The gilding of book edges, for example, is a hand process requiring the greatest care and skill, as may be realized from the fact that on a fine "International" Bible the thin film of gold must cling to the edge of a page 1-1000 of an inch thick and stay there through years of usage.

The Winston Photogravure Illustrated Books, and other choice hand-made leather editions, employ the entire time of a force of artisans whose work has won the highest awards at expositions for original design and skilful execution.

From its conception, and before it is ready for the reader, a book goes through from 50 to 100 distinct and more or less complicated operations.

Pamphlet binding, job printing, and other minor arts incidental to the requirements of a modern book manufactory, are also to be found in the Winston Building. The photographs with which this booklet is illustrated were taken in our plant and represent most of the processes we have described.

"A good book is the precious life-blood of a master-spirit, embalmed and treasured up to a life beyond life."—Milton.





THE SHEET ROOM is where the component sheets of a book are assembled and where the illustrations are tipped in the folded sheets.



Here the 600 styles of "International" Bibles, and the 2,000 other Winston publications, are displayed. In this room many booksellers select their season's line, and innumerable retail sales are made.

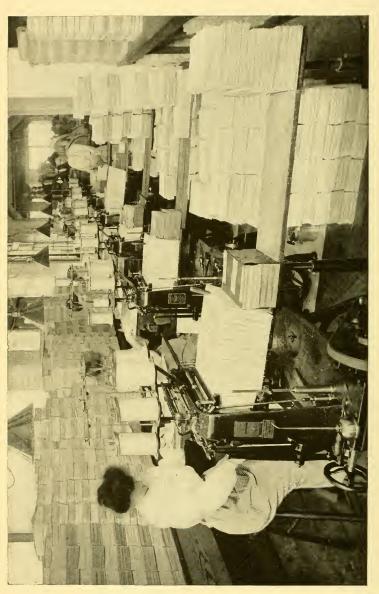
#### TWENTY-FIVE YEARS OF PROGRESS.

(Reprinted from the Philadelphia Press.)

"Some books are to be tasted, others to be swallowed, and some few to be chewed and digested."—Francis Bacon.

"HE John C. Winston Company had its origin in the second story front room of a typical old Philadelphia dwelling house at 1009 Arch Street, directly opposite to where now stands the prominent Winston Building, covering 135,000 square feet of floor space.

"For the first few years the publication and sale of one book engrossed the attention of the new publisher. This book proved very successful, and was followed by other equally fortunate publications which quickly gave the firm a creditable reputation in the publishing world. The business prospered, and grew rapidly. At present the Company publishes and manufactures about 2,000 different books and over 600 styles of 'International' Bibles and Testaments, with an annual output of several million volumes.



After the sheets of a book are folded into "signatures" and assembled, each individual signature is fed in its proper order into the sewing machines. The sewing machines shown here are capable of sewing 10,000 books of ordinary size per day.

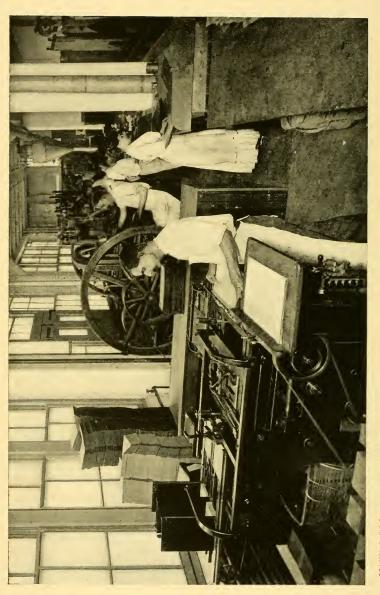
"Five years after the founding of the firm larger quarters became necessary, and a location was secured in a business block at Sixth and Arch Streets. Five years later a further enlargement of the business resulted in removal to Seventh and Arch Streets. It was while in these quarters that the firm, in order to serve its rapidly growing trade more promptly, purchased a modernly equipped bookbinding plant, which was located on Race Street.

"In five years more the increasing business necessitated another removal to 718-724 Arch Street, where a complete printing establishment was added to the business. The bindery was also removed to the same building, thereby housing under one roof a complete publishing and book manufacturing plant.

"It was while at this address that the incorporation of the business took place on April 11, 1900. It also marked the entrance of the house into Bible publication, for it seized a favorable opportunity to purchase from the Publishing Concern of the Methodist Episcopal Church the entire stock, plant



Up to this stage the leaves of a book are untrimmed. These machines trim the three outside edges of two stacks of books in two strokes of the knife. Each volume is then inspected for torn pages and other imperfections that might have been hidden in the folded sheets before the books were trimmed.



MAKING BOOK COVERS BY MACHINE. The operator has only to feed in the cloth; the boards and other necessary parts in the making of STAMPING PRESSES are shown in the background; these presses emboss the gold and also ink the book covers. the cover are fed automatically, and completed covers are turned out at the rate of about 12 per minute.

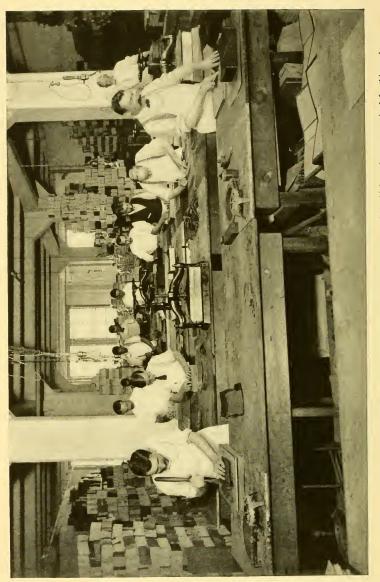


An interesting operation is the laying on of gold on the edges of books and producing the beautiful finish of a red-under-gold-edge Bible.

and good-will of the 'International' Series of Bibles. Adopting new ideas in this line brought a further enlargement of the business, which resulted in the erection of the Winston Building, planned and built to meet the special requirements of the publishing business. In the Summer of 1904 the Company removed to this splendid modern building.

"The Winston Building occupies nearly half an acre of ground in the heart of the city. Its frontage is 100 feet and embraces Nos. 1006-1008-1010-1012-1014-1016 Arch Street. The building and business represent an investment of over \$1,500,000.00. Every facility for the rapid handling of the business of the Company has been incorporated, including not only the latest but also much specially built machinery.

"Scarcely a year had elapsed after the occupation of the new building, when another large addition was acquired in the purchase of the publishing business of Messrs. Henry T. Coates & Company, successors to Porter & Coates, and a notable pedigree of publishers. This acquisition included a large line of Standard Books, Juvenile Books, and other meritorious publications, which have been augmented from year to year by the issue of many new volumes.



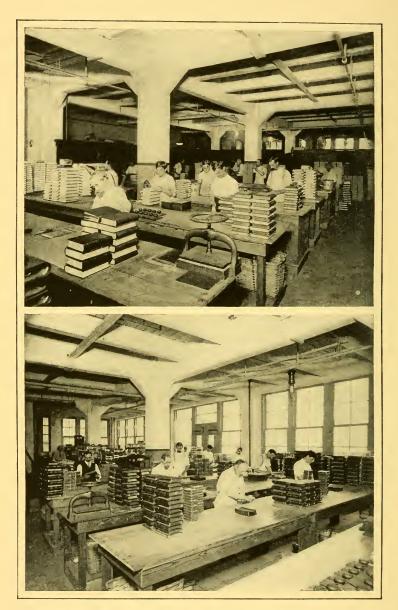
MAKING FLEXIBLE COVERS FOR BOOKS AND BIBLES. Skilled workmen of the highest class are required for this work.

"An English connection was the next step, and came by the purchase in 1907 of the American business of William Collins, Sons & Co., Limited, of London and Glasgow, one of the largest publishers on British soil.

"The John C. Winston Company has now passed its quarter century of actual existence, and (as has often been pointed out) right on the same street where it began. It is now a factor in every market where books and Bibles are sold. Publishers, jobbers, booksellers, news companies, newspapers, premium users, subscription publishers, mail order houses, religious depositors, State Educational Boards, colleges, schools, and numerous other institutions and businesses are numbered among its customers. The whole United States, Canada, Great Britain and Australia are its principal territory, while to Europe, Africa, India, China, Japan, Mexico, South America and our Island Possessions—wherever the English language is spoken throughout the world—its publications find their way.

"A progressive spirit, guided by good business principles, has characterized The John C. Winston Company, since its foundation. Its development has also been furthered greatly by the loyalty of the co-workers in its personnel. The John C. Winston Company comprises many of its former younger employees, who have been trained to responsible positions, and also some of the ablest men in the publishing business, who have been attracted to it by the opportunity for advancement. It has to-day an organization ready to meet the requirements of all branches of the book trade with prompt, just and intelligent service."

"The true University of these days is a collection of books."—Carlyle.



When the work is completed on the sheets of a book and the cover is in final shape, the one is encased in the other. These illustrations show the book and Bible departments of the bindery where this work is done.



PUTTING PATENT THUMB INDEXES ON BOOKS AND BIBLES. The demand for the "International" Thumb Index, by which a book or Bible can be opened in the center and all the letterings read at once, has increased this department to many times the size shown in this photograph.

## GREETINGS TO PRESENT AND FUTURE CUSTOMERS

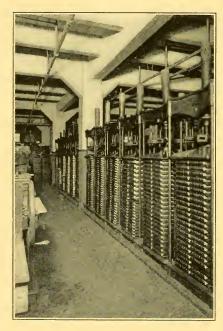
#### TO BOOK-SELLERS:

HE Winston publications, comprising over 2,000 titles, appeal to all book-sellers, from those whose business is in expensive volumes and editions to those who specialize on books of a popular price and character. There are two reasons for this wide popularity of the Winston line: First, its variety, covering as it does the widest possible field of interest and value—fiction for all classes, standard authors, the Photogravure Illustrated Books of Travel, history, biography, poetry, religious works, popular reference works, books of useful information on many practical subjects, and a most complete line of juvenile books, including the celebrated Alger, Ellis and Castlemon Series. Second, for the strong sellers it includes; for example John Trotwood Moore's "Bishop of Cottontown," though published several years ago, is still selling thousands annually; the "Universal Dictionary" has sold over 200,000 in

two years; "Hurlbut's Story of the Bible," of which a Self-Pronouncing edition has just been issued, has firmly established itself as the standard work of its kind and has sold over 200,000, with an increased sale each year; Alger's "Ragged Dick" is a famous boy's classic and sells about 10,000 a year. These are fair types of the books we publish, and indicate to booksellers the possibilities to be found in handling the Winston line. Our complete catalogue will be sent on request.

#### TO BIBLE USERS:

The "International" Series of Bibles comprises over 600 styles of print, binding and special features. Noted for clear



When a book is placed in its cover it is in a damp condition. It is then put in between boards and pressed, and not removed until thoroughly dry, to insure a permanent shapeliness to the book.

type, accuracy of text, strong, handsome flexible bindings and scholarly helps to Bible study, these admirable editions are supplied in every size and style. from the smallest vest pocket Testament to the most elaborate Family Bible, with or without References. Helps, Self-Pronouncing feature, illustrations, red letter print and special markings. A copy of our large illustrated Bible Catalogue should be in the hands of every one interested in Bibles, and may be had for the asking.



Every Bible and book after being completely bound is carefully examined before being wrapped.

#### TO PREMIUM USERS:

Memorable successes have been achieved by Circulation Managers using our dictionaries, encyclopedias, Bibles and some of our other specialties. We are in position to supply almost any kind of a book to meet special needs, and managers will do well to tell us of their requirements. We are also glad to suggest special premium plans based on a very wide and successful experience in this field.

#### TO PUBLISHERS:

You can get from us the best standard works on subjects which are in constant demand: the best written, best illustrated, best made books, on very profitable terms. We have also many sets of classics and reference books suitable for high class installment business. Timely new books are a specialty with us. Whenever a great subject of national interest looms up, you will be pretty sure to learn that we have the authoritative new book on that subject. It will pay you to keep acquainted with us.



A SECTION OF STOCK AND SHIPPING ROOM

Large editions in cloth or any style of leather are produced by us promptly and on very favorable terms. We are fully prepared to take up any publication from the manuscript, set up, print, bind and deliver it complete for customers in any part of the country. We have done a great deal of this work and are glad at all times to bid on it.

#### TO BUYERS OF PRINTED MATTER:

Our Commercial Printing Department has given satisfaction for many years to a large and increasing clientele. No job is too small or too large to tax our appreciation or facilities. From small business stationery to large editions of elaborate books runs the range of our work in this field. Distant customers, in Porto Rico, California, New England and the South are served as well as local patrons. Fine catalogues, monographs, reports, memorials, school and college records, scientific

journals—in fact every kind of careful printing at reasonable prices—are taken care of by this department, managed by a specialist who has spent his life in this line.

#### FINE BINDING AND EDITION WORK:

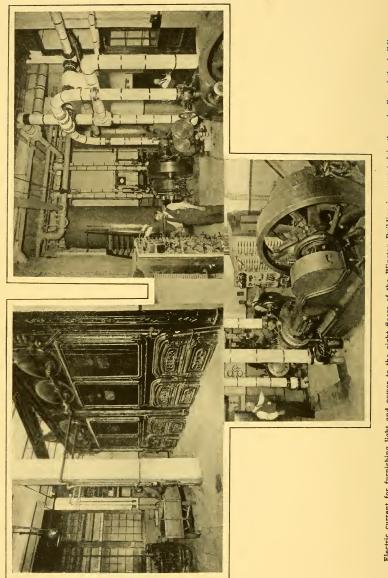
Libraries, collectors, book-sellers and others who have choice books rebound may command the excellent workmanship and artistic skill of our hand binding department. Our capabilities run from plain, durable bindings, such as most libraries require, to original designs in the finest leather. Prices will be found reasonable and are based on the character of the work executed.

#### INOUIRIES SOLICITED:

If in any way interested in books, Bibles, printed matter or binding, let us know what your wants are. It will be our pleasure at all times to earn your favor by prompt attention to inquiries.



IN THE BASEMENT on both sides of the building and running its full length, these fire-proof vaults are erected for holding the plates from which the Winston publications are printed, thereby insuring but a temporary suspension of business in case of a disastrous fire.



Electric current for furnishing light and power to the eight floors of the Winston Building is generated in the subcellar of the building.





